

CLAIMS

1. System for the distribution of television (TV) type video signals with a frequency band of up to about 5 to 900 MHz, the said system comprising:

- an input coaxial cable (41) adapted for connection to a TV antenna (4) or to a cable television network,
- an output coaxial cable (53) adapted for connection to a television set (5),

characterised in that it also comprises:

- a first input processing unit (1) comprising a coaxial input terminal (10), at least one low current terminal (11) for twisted wire pairs and processing means (14) for processing TV signals output from the coaxial cable so as to transform them into signals with substantially the same transmission characteristics on the same frequency band on a twisted wires pair,
- at least one second output processing unit (3) comprising a low current input port (33) for twisted wire pairs, a coaxial output terminal (31) and processing means (34) for processing signals output from a twisted wires pair (12) connected to the first input processing unit (1) so as to transform them into signals substantially identical to the signals output from the said coaxial cable (41), and
- at least one connecting cable (12, 23) consisting of twisted wire pairs connecting the first processing unit (1) to the second processing unit (3).

2. System according to claim 1, in which the first input processing unit (1) comprises means of cutting off (16) the signal transmission in the case in which a cable consisting of

twisted wire pairs (12) is not connected to the low current output terminal (11) of the first input processing unit (1).

3. System according to claim 2, in which the low current
5 output terminal (11) of the first input processing unit (1) comprises means of detecting the presence (17) of a low voltage connector (18) connected to the twisted wires cable (12) and plugged into the said output terminal (11).

10 4. System according to claim 1, 2 or 3, in which the first input processing unit (1) comprises means of cutting off (16) the signal transmission in the case in which a coaxial cable (53) is not connected to the coaxial output terminal (31) of the second input processing unit (3).

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5. System according to claim 4, in which the coaxial
output terminal (31) of the second output processing unit comprises means of detecting the presence (35) of a low
voltage connector (52) connected to an output coaxial cable
20 (53) and plugged into the said coaxial output terminal (31).

6. System according to claim 4, in which one twisted
wires pair in the said connecting cable acts as a loop back
line between the second (3) and the first (1) processing unit
25 to transmit a connector present or absent signal to the cut-off means (16).

7. System according to any one of claims 2 to 6, in which
the first input processing unit (1) comprises signal
30 processing means (14), a cross connect (15) and several low current output terminals (11) for twisted wire pairs each connected to the cross connect (15), the cut-off means (16) acting between the cross connect (15) and the said output

terminals (11) so as to cut off transmission of signals between the cross connect and the output terminal for which the lack of a plugged-in connector (18) is detected.

5 8. System according to any one of the previous claims, in which a sub-cross connect assembly (2) is installed between the first (1) and the second (3) processing units, with at least one cable consisting of twisted wire pairs (12) connecting the first processing unit (1) to the sub-cross
10 connect assembly (2), and at least one other cable consisting of twisted wire pairs (23) connecting the sub-cross connect assembly (2) to the second processing unit (3), the said second unit (3) comprising a coaxial output terminal (31) and at least one output terminal (32) for twisted wire pairs.

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 9. System according to claim 8, in which the second processing unit (3) is in the form of an adapter comprising a low current connector for twisted wire pairs (33) adapted so that it can be plugged onto a low current terminal (24) for
20 twisted wire pairs connected to the said sub-cross connect assembly (2) for a cable consisting of twisted wire pairs (23).

 10. System according to any one of the previous claims,
25 in which the twisted wires pair that transmits the transformed TV signals is shielded.

 11. System according to any one of claims 1 to 10, in which the first input processing unit is an active unit
30 comprising active processing means.

 12. System according to claim 11, in which the active processing means comprise an amplification stage (14).

13. System according to any one of the previous claims, in which the processing means of the second processing unit comprise passive means such as a balun.

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14. System according to any one of the previous claims, in which the second processing unit is provided with a low current terminal (32) connected to the input port (33) through a modulator to route signals on a loop back twisted pair.

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15. TV signals processing unit (1) with a frequency band varying from 5 to 65 MHz for the return channel and 86 to 862 MHz for the down channel, the said processing unit comprising a coaxial input terminal (10), processing means (14) for transforming TV signals output from the input terminal in signals with substantially the same transmission characteristics on the same frequency band and that can be transmitted for a twisted wires pair, and at least one output terminal (11) for twisted wire pairs,

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characterised in that it also comprises means of cutting off (16) the signal transmission acting on the input side of output terminals (11) to cut off the signal transmission at an output terminal that is not connected indirectly, advantageously through a second output processing unit (3) connected to the said terminal through a cable consisting of twisted wire pairs, to a coaxial cable (53) connected to a TV set (5).

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